

crisprd 1.0



Abstract

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Project Title: Supplementing Relaxation & Music for Postoperative Pain

Abstract: *DESCRIPTION (provided by applicant): Despite decades of research on postoperative pain, it is still not being relieved. To date there has been no clinical trial that integrates testing of both pharmacological and nonpharmacological methods of pain relief. Patients remain unaware of a variety of methods that can be used to relieve their own pain and care-providers do not effectively impart this information to patients. In the previous NINR funded grant, we found that the combination of relaxation and music relieved postoperative abdominal pain significantly more than PCA opiates alone. The effect of this nonpharmacological adjuvant for pain was also clinically significant: patients reported 24 percent less pain than when PCA opioids were used. The nonpharmacological intervention also reduced sympathetic nervous effects. However, patients continued to have moderate pain. More relief is needed to reduce the effect of pain on stress and immune function, thereby placing patients in a better position to resist infection and surgical complications. Teaching patients about appropriate use of both pharmacological and nonpharmacological methods of analgesia merits testing. Patient teaching about pain management is expected to increase patient knowledge of pharmacological methods they can use for relief, and to decrease apprehension and opioid fears; while relaxation and music relaxes and distracts patients from the pain. The aim of this RCT is to test and compare the efficacy of nonpharmacologic relaxation and music, patient teaching about pain management, and the combination of both. Abdominal surgical patients expected to receive PCA will be randomly assigned to one of four groups: (1) nonpharmacologic therapy, (2) patient teaching about pain management, (3) the combination of nonpharmacologic therapy and patient teaching about pain management, and (4) a control group receiving PCA alone. The three audiotaped interventions for pain*

will be tested in 356 abdominal surgical patients before and after 20-minute periods of rest, once on the day of surgery, and twice on postoperative day 1. Outcome measures include postoperative pain, stress, side effects of opioids, and immunity. Pain sensation and distress will be measured with visual analogue scales (VAS) along with stress (salivary cortisol) and immune response (salivary IgA) at the pre and posttests. Subjects will be given the tape to use whenever they wish in the first two days. A timing device in the tape recorder will be used to control for minutes of use, and pain and side effects will be measured every four hours. Knowledge of the effects of patient teaching and non-invasive methods to reduce post-operative pain, stress, and immune function may facilitate postoperative recovery with lower health-care cost.

Thesaurus Terms:

*behavior therapy, human therapy evaluation, music therapy, pain, postoperative state, surgery
clinical trial, combination therapy, education evaluation /planning, health education, relaxation
audiotape, human subject, patient oriented research*

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